REMARKS

Claims 1-19 are pending in this application, and of these, claims 13-18 stand withdrawn from consideration upon election of claims 1-12 and 19 pursuant to the Restriction Requirement mailed October 1, 2001. Accordingly, claims 1-12 and 19 are currently under examination. Applicants reserve the right to prosecute non-elected claims 13-18 in one or more continuing or divisional applications.

Claims 1, 10, and 19 are amended to recite that the low-temperature cured film comprises a film cured at a temperature of less than about 200°C. This amendment is supported by the Specification at page 13, lines 3-4. Non-material amendments are made to claim 3 so that the language is now consistent with claim 1 as amended. Claim 12 is amended to recite that the cure temperature is less than about 150 °C. This amendment is supported by the Specification at page 12, lines 17-20. Thus, there is no issue of new matter.

III THE REJECTIONS UNDER 35 U.S.C. § 102 AND § 103

Claims 1, 2, 4, 6-12, and 19 stand rejected under 35 U.S.C. §102 and § 103 on the grounds that they are anticipated by U.S. Patent No. 5,953,627 to Carter ("Carter") or rendered obvious in view of the combination of Carter with U.S. Patent No. 5,016,982 to Fergason ("Fergason").

Applicants' claims are directed to field effect transistors comprising a dielectric layer formed by low-temperature cure of a silsequioxane precursor. Carter's silsesquioxane dielectric material is completely different than Applicants dielectric layer. Carter discloses preparing his dielectric material by cross condensing an silsesquioxane precursor in the presence of an organic amine having a boiling point of greater then 150 °C then heating to remove the amine. Indeed, Carter teaches heating the precursor film to over 400 °C (see, e.g., col. 4, lines 65-67). At this temperature, not only does the amine evaporate, the alkyl residues of the silsesquioxane are oxidized leaving a silicon dioxide type dielectric film. In contrast to Carter, Applicants cure the silsesquioxane precursor at low temperature (i.e., less than about 200 °C, preferably, less than 150 °C), see e.g., page 8, lines 17-18. This limitation is now included in the amended claims.

As a result of this low cure temperature, Applicants' dielectric layer maintains the organic radicals of the silsesquioxane precursors. Accordingly, the Applicants' dielectric layer is completely different chemically and in properties from Carter's dielectric material.

In sum, Carter does not teach using a low-temperature cure at temperatures less than about 200 °C as required by Applicants' claims and thus cannot anticipate In view of this discussion, the Examiner is respectfully requested to withdraw the 35 U.S.C. § 102 rejection over Carter.

Furthermore, Carter provides no suggestion or motivation to use a cure temperature of less than about 200 °C, thus cannot render Applicants claimed invention obvious under 35 U.S.C. § 103. Fergason is directed to a liquid crystal display connected in series with a capacitor and contains no mention of silsesquioxanes and do does not remedy the deficiencies of Carter. In view of this discussion, the Examiner is respectfully requested to withdraw the 35 U.S.C. § 103 rejections over Carter and over Carter in view of Fergason.

In view of the above remarks and amendments, reconsideration is requested and a speedy allowance is earnestly sought. No fee is required for entry of this Reply; if any fee is due however, please charge the required fee to deposit account number 501358.

Respectfully submitted,

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EXHIBIT A: Marked Up Version Of The Amended Claims

Insertions are indicated by underlined text and deletions are indicated by strike-out text.

1. (amended) An organic field effect transistor (FET) comprising an active dielectric layer disposed on a substrate, the substrate being suitable for an organic FET, wherein the active dielectric layer comprises a ~~low-temperature cured~~ film of at least one liquid-deposited silsesquioxane precursor cured at a temperature of less than about 200 °C to provide a high-dielectric strength film.

3. (amended) The organic FET of claim 1 ~~in which the low-temperature cured film comprises a film cured at temperatures of~~ wherein the temperature is less than about 150°C.

10. (amended) An organic field transistor (FET) comprising an active dielectric layer disposed on a substrate, the substrate being suitable for an organic (FET), wherein the active dielectric layer comprises a ~~low-temperature cured~~ high-speed deposition product of at least one liquid-deposited alkyl(methyl) and alkyl(methyl) phenyl silsesquioxane precursors cured at a temperature of less than about 200 °C, and has a dielectric constant of above about 2.

12. (amended) The organic FET of claim 10 ~~in which the low-temperature cured product comprises a product cured at~~ wherein the temperatures ~~of~~ is less than about ~~200°C~~ 150°C.

19. (twice amended) An article comprising an organic FET comprising:

a gate electrode on a substrate;

an active dielectric layer over the substrate;

an active semiconducting layer over the active dielectric layer, wherein the active dielectric layer comprises a ~~low-temperature cured~~ high-speed deposition product of at least silsesquioxane precursor cured at a temperature of less than about 200 °C; and

a source electrode and a drain electrode in contact with the active semiconducting layer.